IFW

File No.: 6013-137US IC/lyl Montréal, Canada

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Dragan Tubic et al.
Serial No.: 10/560,130
Filing Date: December 9, 2005
Art Unit:

Title: THREE-DIMENSIONAL MODELING FROM ARBITRARY THREE-DIMENSIONAL CURVES

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

NO FEE

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith on a PTO-1449 form is a listing of the documents known to applicant in order to comply with applicant's duty of disclosure pursuant to 37 C.F.R. § 1.56.

The submission of any document which is not a statutory bar is not intended as an admission that such document constitutes prior art against the claims of the present application. Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

Statement of Relevancy

The listed document is being submitted either in compliance with 37 C.F.R. §1.97(b), within three (3) months of the filing date of a national application or of the date of entry of the national stage in an international application, or before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under §1.114; or pursuant to 37 C.F.R. §1.97(e)(1), within three (3) months from the date of an office action or of a search report issued in a foreign counterpart application citing each of the documents contained in the present statement; or pursuant to 37 C.F.R. §1.97(e)(2), within three (3) months from the first knowledge of each submitted document by any individual designated in C.F.R. §1.56(c), when each such document was not cited in a communication from a foreign patent office in a counterpart foreign application.

In the case of submission under 37 C.F.R. §1.97(e)(1) and (2), the undersigned Attorney/Agent of Record hereby certifies that the enclosed list of references is hereby submitted within three months (1) from the issuance of the foreign action or search report, or (2) from said first knowledge, respectively.

The Examiner is kindly requested to consider these references during the examination of the above-identified application, making the references of record, and to return an initialed copy of the PTO-1449 Form to the below-signed agent.

Respectfully,

April 21, 2006
Date

Agent of the Applicant
Christian Cawthorn, Reg. No. 47,352
OGILVY RENAULT LLP
Customer Number: 020988

PTO/SB/08A/B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A and B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known	
Application Number	**10/560,130**
Filing Date	**12/09/2005**
First Named Inventor	**Dragan Tubic**
Art Unit	
Examiner Name	
Attorney Docket Number	**6013-137US IC/lyl**

OIPE IAP3 APR 24 2006 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number – Number – Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		US- 5,946,645	1999-08-31	Marc Rioux et al.	
		US- 6,542,249	2003-04-01	Jonathan D. Kofman et al.	
		US- 5,850,289	1998-12-15	Guy Richard John Fowler et al.	
		US-20030052875	2003-03-20	Ioan Alexandru Salomie	
		US- 5,963,664	1999-10-05	Rakesh Kumar et al.	
		US- 6,591,004	2003-07-08	David C. VanEssen et al.	
		US- 6,081,269	2000-06-27	Peter Quarendon	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document – Country Code3 – Number4 – Kind Code5 *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant Of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T[6]

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[2]
		RUSINKIEWICZ, S., LEVOY, M., *Efficient variants of the ICP algorithm*, 2001, Stanford University, International Conference on 3D Digital Imaging and Modeling (3DIM). http://www.cs.princeton.edu/~smr/papers/fasticp/fasticp_paper.pdf	
		KANAYA, I., CHIHARA, K., *A fast algorithm of iterative closest point method*, 2002, 97-102 p., Proceedings of 19th Sensor Symposium, The Institute of Electrical Engineers of Japan. http://www-sens.sys.es.osaka-u.ac.jp/users/kanaya/publication/2002/kanaya-naist-sensor---2002/kanaya-naist-sensor-arti.pdf	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A/B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A and B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known	
Application Number	10/560,130
Filing Date	12/09/2005
First Named Inventor	Dragan Tubic
Art Unit	
Examiner Name	
Attorney Docket Number	6013-137US IC/lyl

OIPE IAP5
APR 24 2006
PATENT & TRADEMARK OFFICE

		SAGAWA, R. ET AL., *Iterative refinement of range images with anisotropic error distribution*, January 2002, 79-85 p., Proc. of 2002 IEEE/RSJ International Conference on Intelligent Robots and Systems. http://www.cvl.iis.u-tokyo.ac.jp/papers/all/0049.pdf	
		BERALDIN, J.-A. ET AL., *Portable digital 3-D imaging system for remote sites*, May 31 – June 3, 1998, 326-333 p., published in Proceeding of the 1998 IEEE International Symposium on Circuit and Systems, Monterey, CA, USA.	
		HEBERT, P., *A shelf-referenced hand-held range sensor*, May 2001, 5-12 p., published in proceeding of the IEEE International Conference on Recent Advances in 3-D Digital Imaging and Modeling, Québec.	
		BLAIS, F., *A Review of 20 Years of Ranges Sensor Development*, 2003, 62-76 p., SPIE volume 5013, published in, Videometrics VII, in Proceedings of SPIE-IS&T Electronic Imaging, NRC 44965.	
		RIOUX, M., *Digital 3-D Imaging, theory and applications*, 1994, 2-15 p., SPIE vol. 2350, published in in Proceedings of Videometrics III.	
		HEBERT, P. ET AL., *Toward a hand-held laser range scanner: integrating observation-based motion compensation*, January 1998, 2-13 p., vol. 3313, published in Proceedings of SPIE.	
		HOPPE, H. ET AL., *Surface Reconstruction from Unorganized Points*, July 1992, 71-78 p., vol. 26, published in SIGGRAPH'92 Proceedings, Computer Graphics USA, XP000972231.	
		CURLESS, B. ET AL., *A Volumetric Method for Building Complex Models from Range Images*, 1996, 303-312 p., published in SIGGRAPH'96 Proceedings.	
		HILTON, A. ET AL., *Geometric Fusion for a Hand-Held 3D Sensor*, 2000, 12: 44-51 p., published in Machine Vision and Applications.	
		MASUDA, T., *Registration and Integration of Multiple Range Images by Matching Signed Distance Fields for Object Shape Modeling*, 2002, 51-65 p., vol. 87, published in Computer Vision and Image Understanding Academic Press, USA, XP002304316.	
		TUBIC, D. ET AL., *A volumetric approach for interactive 3D modeling*, 2002, 150-158 p., Proceedings First International Symposium on 3D Data Processing Visualization and Transmission IEEE Comput. SOC LOS ALAMITOS, CA, USA, XP002304315.	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A/B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A and B/PTO				*Complete if Known*	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				**Application Number**	**10/560,130**
				Filing Date	**12/09/2005**
				First Named Inventor	**Dragan Tubic**
(use as many sheets as necessary)				Art Unit	
				Examiner Name	
Sheet	3	of	3	Attorney Docket Number	**6013-137US IC/lyl**

OIPE IAP3 APR 24 2006 PATENT & TRADEMARK OFFICE

		TUBIC, D. ET AL., *3D surface modeling from range curves*, 2003, I-842 p., vol. 1, Proceedings 2003 IEEE Computer Society Conference on Computer Vision and Pattern Recognition IEEE Comput. SOC LOS ALAMITOS, CA, USA, XP002304317.	
		TUBIC, D. ET AL., *Efficient surface reconstruction from range curves*, 2003.	
		TUBIC, D. ET AL., *3D Surface Modeling from Curves*, December 18, 2002.	
		MENDONÇA, PAULO R. S. ET AL., 1999, *Estimation of Epipolar Geomatry from Apparent Contours: Affine and Circular Motion Cases*, 9-14 p., vol. 1, Proceedings, 1999 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (Cat. No PR00149) IEEE Comput. SOC LOS ALAMITOS, CA, USA, XP010347634.	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, Washington, DC 20231.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.